

Title (en)
SUPERVISORY THERMAL MANAGEMENT SYSTEM AND METHOD FOR ENGINE SYSTEM WARM UP AND REGENERATION

Title (de)
WÄRMEMANAGEMENT-ÜBERWACHUNGSSYSTEM UND VERFAHREN ZUR ERWÄRMUNG UND REGENERATION EINES MOTORSYSTEMS

Title (fr)
SYSTÈME DE SUPERVISION DE LA GESTION THERMIQUE, ET PROCÉDÉ DE MISE EN TEMPÉRATURE ET DE RÉGÉNÉRATION DU SYSTÈME MOTEUR

Publication
EP 2661388 B1 20200506 (EN)

Application
EP 12732143 A 20120106

Priority

- US 201161430430 P 20110106
- US 201161431290 P 20110110
- US 201161431291 P 20110110
- US 2012020559 W 20120106

Abstract (en)
[origin: WO2012094646A1] This disclosure provides a thermal management system and method that can recommend operational behavior to an operator of an engine system to optimize fuel economy over a period of time in which a components of the engine system is in a warm up and/or regeneration state. In one representative embodiment, the expected temperature change of the engine component at a later time is determined based on inefficient operation of the engine, such as a transmission down shift resulting in higher engine speed and lower engine torque, and the expected temperature change of the engine component resulting from operating the engine under current conditions or expected conditions at that later time is determined. A determination is made as to whether the inefficient engine operation is the optimal operation in view of fuel economy and a recommendation is generated for the operator based if optimal operation is determined.

IPC 8 full level
B60W 50/14 (2020.01); **B60W 30/194** (2012.01); **F01N 9/00** (2006.01); **F02D 41/02** (2006.01); **F02D 41/14** (2006.01); **F16H 61/02** (2006.01)

CPC (source: EP US)
B60W 10/06 (2013.01 - US); **B60W 10/11** (2013.01 - US); **B60W 30/194** (2013.01 - EP US); **B60W 50/14** (2013.01 - EP US); **F01N 9/002** (2013.01 - EP US); **F02D 41/029** (2013.01 - EP US); **F02D 41/1447** (2013.01 - EP US); **F16H 61/0213** (2013.01 - EP US); **B60W 2510/1005** (2013.01 - EP US); **B60W 2710/0694** (2013.01 - EP US); **F02D 41/0235** (2013.01 - EP US); **F02D 41/024** (2013.01 - EP US); **F02D 41/405** (2013.01 - EP US); **F02D 2041/1412** (2013.01 - EP US); **F02D 2200/701** (2013.01 - EP US); **F16H 2061/0015** (2013.01 - EP US); **F16H 2061/0232** (2013.01 - EP US); **Y02T 10/40** (2013.01 - EP US); **Y02T 10/60** (2013.01 - US)

Cited by
DE102021125204A1

Designated contracting state (EPC)
AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

DOCDB simple family (publication)
WO 2012094646 A1 20120712; EP 2661388 A1 20131113; EP 2661388 A4 20180228; EP 2661388 B1 20200506; EP 3715207 A1 20200930; US 2012203434 A1 20120809; US 2014052353 A1 20140220; US 8577568 B2 20131105; US 8818659 B2 20140826

DOCDB simple family (application)
US 2012020559 W 20120106; EP 12732143 A 20120106; EP 20164058 A 20120106; US 201213345642 A 20120106; US 201314063367 A 20131025